BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:Improvements to Roads and Drain at Doddachannappa layout,Raghuram layout,Kuvempunagara 1st stage, Valmikinagara in ward no. 11 Kuvempunagara

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Leng (m)	Bread (m)	Dept (m)	Quantity	Rate in RS.	Amount in RS.	Remark
Item No. 01		**Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications**									
			Cum								
		Vide Total Executed Quantity from Pre Measurement Sheet page no. 01 - 07						**763.30**			
								TOTAL	**763.30**		
								QUANTITY LIMITED TO	**758.10**	**243.88**	**184885.43**
Item no.02		**Removing and refixing stone slabs of drains and pointing in CM (1:3)**									
			Sqm								
		Vide Total Executed Quantity from Pre Measurement Sheet page no. 08 - 10						1292.5			
								TOTAL	**1292.5**		
								QUANTITY LIMITED TO	**1196.1**	**111.30**	**133125.93**
Item no.03		**Providing granite slabs of selected quality roughly dressed having a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing etc**									
Measurement taken on											
		Extra on 2nd cross									
		L H S									
10	14		Sqm	1	4	1.35		5.40			
20	22		Sqm	1	2	1.35		2.70			
33	37		Sqm	1	4	1.35		5.40			
50	54		Sqm	1	4	1.35		5.40			
70	72		Sqm	1	2	1.35		2.70			
77	81		Sqm	1	4	1.35		5.40			
88	92		Sqm	1	4	1.35		5.40			
		R H S									
4	9		Sqm	1	5	1.35		6.75			
19	23		Sqm	1	4	1.35		5.40			
35	38		Sqm	1	3	1.35		4.05			
53	56		Sqm	1	3	1.35		4.05			
70	74		Sqm	1	4	1.35		5.40			
83	87		Sqm	1	4	1.35		5.40			
88	92		Sqm	1	4	1.35		5.40			
		3rd Cross									
		L H S									
9	13		Sqm	1	4	1.35		5.40			
19	23		Sqm	1	4	1.35		5.40			
39	44		Sqm	1	5	1.35		6.75			
53	57		Sqm	1	4	1.35		5.40			
70	72		Sqm	1	2	1.35		2.70			
83	87		Sqm	1	4	1.35		5.40			

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage		Description of Item	Unit	No	Leng	Bread	Dept	Quanti	Rate in	Amount in	Remark
From	To				(m)	(m)	(m)	ty	RS.	RS.	
95	99		Sqm	1	4	1.35		5.40			
106	110		Sqm	1	4	1.35		5.40			
119	123		Sqm	1	4	1.35		5.40			
		R H S									
7	10		Sqm	1	3	1.35		4.05			
16	19		Sqm	1	3	1.35		4.05			
39	42		Sqm	1	3	1.35		4.05			
50	53		Sqm	1	3	1.35		4.05			
61	64		Sqm	1	3	1.35		4.05			
79	82		Sqm	1	3	1.35		4.05			
95	99		Sqm	1	4	1.35		5.40			
105	110		Sqm	1	5	1.35		6.75			
120	123		Sqm	1	3	1.35		4.05			
		Church Road									
		L H S									
11	14		Sqm	1	3	1.35		4.05			
16	19		Sqm	1	3	1.35		4.05			
33	38		Sqm	1	5	1.35		6.75			
49	52		Sqm	1	3	1.35		4.05			
66	69		Sqm	1	3	1.35		4.05			
80	84		Sqm	1	4	1.35		5.40			
99	102		Sqm	1	3	1.35		4.05			
111	114		Sqm	1	3	1.35		4.05			
125	128		Sqm	1	3	1.35		4.05			
136	139		Sqm	1	3	1.35		4.05			
150	153.5		Sqm	1	3.5	1.35		4.73			
		R H S									
4	8		Sqm	1	4	1.35		5.40			
19	23		Sqm	1	4	1.35		5.40			
39	43		Sqm	1	4	1.35		5.40			
45	50		Sqm	1	5	1.35		6.75			
62	66		Sqm	1	4	1.35		5.40			
75	79		Sqm	1	4	1.35		5.40			
99	103		Sqm	1	4	1.35		5.40			
108	112		Sqm	1	4	1.35		5.40			
122	126		Sqm	1	4	1.35		5.40			
136	138.1		Sqm	1	2.1	1.35		2.83			
		Kalthur Layout									
		2nd Cross L H S									
4	10		Sqm	1	6	1.35		8.10			
18	23		Sqm	1	5	1.35		6.75			
33	37		Sqm	1	4	1.35		5.40			
50	53.4		Sqm	1	3.4	1.35		4.59			
		2nd cross R H S									
11	15		Sqm	1	4	1.35		5.40			
15	19		Sqm	1	4	1.35		5.40			
30	36		Sqm	1	6	1.35		8.10			
44	49		Sqm	1	5	1.35		6.75			

Assistant Executive Engineer
Vidyaranyapura Sub Division
RBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Leng (m)	Bread (m)	Dept (m)	Quantity	Rate in RS.	Amount in RS.	Remark
		5th Main road									
		Kalthur Layout (Naveen complex)									
		L H S									
9	15		Sqm	1	6	1.35		8.10			
25	31		Sqm	1	6	1.35		8.10			
41	45		Sqm	1	4	1.35		5.40			
52	56		Sqm	1	4	1.35		5.40			
		Kalthur layout 1st cross									
		R H S									
11	15		Sqm	1	4	1.35		5.40			
18	22		Sqm	1	4	1.35		5.40			
		L H S									
12	16		Sqm	1	4	1.35		5.40			
19	23		Sqm	1	4	1.35		5.40			
39	41.5		Sqm	1	2.5	1.35		3.38			
51	54.8		Sqm	1	3.8	1.35		5.13			
							TOTAL	**366.26**			
							QUANTITY LIMITED TO	**364.81**	**742.00**	**270689.02**	
Item no.04		**Plain cement concrete M10 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications**									
			Cum								
		Vide Total Executed Quantity from Pre Measurement Sheet page no. 11 – 15						503.75			
							TOTAL	**503.75**	**5421.90**		
							QUANTITY LIMITED TO	**495.7**	**5421.90**	**2687663.0**	
Item no.5		**Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire chargedof machines,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum**									
Measurement taken on											
		C C Road									
		Dodda chennappa layout									

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Leng (m)	Bread (m)	Dept (m)	Quantity	Rate in RS.	Amount in RS.	Remark
		Ambedkar statue									
0	15		Cum	1	15	3.70	0.15	8.33			
15	30		Cum	1	15	3.35	0.15	7.54			
30	45		Cum	1	15	3.00	0.15	6.75			
45	60		Cum	1	15	2.75	0.15	6.19			
60	75		Cum	1	15	3.40	0.15	7.65			
75	90		Cum	1	15	3.93	0.15	8.83			
90	97		Cum	1	7	3.35	0.15	3.52			
		Ambedkar statue Road									
		Left side									
		1st cross									
0	15		Cum	1	15	2.15	0.15	4.84			
15	30		Cum	1	15	2.30	0.15	5.18			
30	45		Cum	1	15	2.36	0.15	5.30			
45	60		Cum	1	15	2.40	0.15	5.40			
60	75		Cum	1	15	2.50	0.15	5.63			
75	90		Cum	1	15	2.60	0.15	5.85			
90	105		Cum	1	15	2.70	0.15	6.08			
105	120		Cum	1	15	3.05	0.15	6.86			
120	135		Cum	1	15	3.68	0.15	8.27			
135	136.5		Cum	1	2	3.50	0.15	0.79			
		Dodda chennappa									
		2nd Cross road									
0	15		Cum	1	15	4.35	0.20	13.05			
15	30		Cum	1	15	3.95	0.20	11.85			
30	45		Cum	1	15	4.05	0.20	12.15			
45	60		Cum	1	15	4.08	0.20	12.23			
60	75		Cum	1	15	3.78	0.20	11.33			
75	84.8		Cum	1	10	4.05	0.20	7.94			
		Extra on 2nd cross									
0	15		Cum	1	15	3.88	0.15	8.72			
15	30		Cum	1	15	3.38	0.15	7.59			
30	45		Cum	1	15	3.20	0.15	7.20			
45	60		Cum	1	15	3.20	0.15	7.20			
60	75		Cum	1	15	3.00	0.15	6.75			
75	90		Cum	1	15	3.05	0.15	6.86			
90	92		Cum	1	2	3.20	0.15	0.96			
		3rd Cross									
0	15		Cum	1	15	1.90	0.15	4.28			
15	30		Cum	1	15	2.10	0.15	4.73			
30	45		Cum	1	15	2.30	0.15	5.18			
45	60		Cum	1	15	2.00	0.15	4.50			
60	75		Cum	1	15	2.80	0.15	6.30			
75	90		Cum	1	15	2.60	0.15	5.85			
90	105		Cum	1	15	1.90	0.15	4.28			
105	120		Cum	1	15	2.10	0.15	4.73			
120	135		Cum	1	15	3.10	0.15	6.98			
135	150		Cum	1	15	3.25	0.15	7.31			

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Leng (m)	Bread (m)	Dept (m)	Quantity	Rate in RS.	Amount in RS.	Remark
150	165		Cum	1	15	2.70	0.15	6.08			
165	170		Cum	1	5	2.70	0.15	2.03			
		Dodda chennappa									
		Cross road									
0	15		Cum	1	15	4.30	0.20	12.90			
15	30		Cum	1	15	3.70	0.20	11.10			
30	45		Cum	1	15	3.10	0.20	9.30			
45	60		Cum	1	15	3.10	0.20	9.30			
60	75		Cum	1	15	3.10	0.20	9.30			
75	89.3		Cum	1	14	5.80	0.20	16.59			
		Cross Road 1									
0	15		Cum	1	15	3.20	0.20	9.60			
15	27		Cum	1	12	3.70	0.20	8.88			
		Cross Road 2									
0	15		Cum	1	15	4.80	0.20	14.40			
15	28		Cum	1	13	4.60	0.20	11.96			
		Cross Road 3									
0	15		Cum	1	15	4.80	0.20	14.40			
15	29		Cum	1	14	4.60	0.20	12.88			
							TOTAL	419.62			
							QUANTITY LIMITED TO	415.97	5210.96	2167577.0	

Item no.06 **Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. blocks of size 400x150x200mm**

			Sqm								
		Vide Total Executed Quantity from Pre Measurement Sheet page no. 16 - 18						712.32			
							TOTAL	**712.32**			
							QUANTITY LIMITED TO	**708.80**	**979.44**	**694226.97**	

Item no.7 **Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete.**

Measurement taken on											
		Pre cast slab									
		Church Road									
		L H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
45	60		Sqm	1	15	0.9		13.50			
60	75		Sqm	1	15	0.9		13.50			
75	90		Sqm	1	15	0.9		13.50			
90	105		Sqm	1	15	0.9		13.50			
105	120		Sqm	1	15	0.9		13.50			

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage		Description of Item	Unit	No	Leng	Bread	Dept	Quanti	Rate in	Amount in	Remark
From	To				(m)	(m)	(m)	ty	RS.	RS.	
120	135		Sqm	1	15	0.9		13.50			
135	150		Sqm	1	15	0.9		13.50			
150	153.5		Sqm	1	3.5	0.9		3.15			
		R H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
45	60		Sqm	1	15	0.9		13.50			
60	75		Sqm	1	15	0.9		13.50			
75	90		Sqm	1	15	0.9		13.50			
90	105		Sqm	1	15	0.9		13.50			
105	120		Sqm	1	15	0.9		13.50			
120	135		Sqm	1	15	0.9		13.50			
135	148.1		Sqm	1	13.1	0.9		11.79			
		Kalthur Layout									
		2nd Cross L H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
45	53.4		Sqm	1	8.4	0.9		7.56			
		2nd cross R H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
45	50.6		Sqm	1	5.6	0.9		5.04			
		5th Main road		1							
		Kalthur Layout (Naveen complex)									
		L H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
50	55		Sqm	1	5	0.9		4.50			
		Kalthur layout 1st cross		1							
		R H S		1							
0	15		Sqm	1	15	0.9		13.50			
15	22		Sqm	1	7	0.9		6.30			
		L H S									
0	15		Sqm	1	15	0.9		13.50			
15	30		Sqm	1	15	0.9		13.50			
30	45		Sqm	1	15	0.9		13.50			
50	54.8		Sqm	1	4.8	0.9		4.32			
		Extra on 2nd cross									
		L H S									
0	15		Sqm	1	15	0.75		11.25			
15	30		Sqm	1	15	0.75		11.25			
30	45		Sqm	1	15	0.75		11.25			

Assistant Executive Engineer
Vidyaranyapura Sub Divisio.
BBMP, Bangalore - 97

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Leng (m)	Bread (m)	Dept (m)	Quantity	Rate in RS.	Amount in RS.	Remark
45	60		Sqm	1	15	0.75		11.25			
60	75		Sqm	1	15	0.75		11.25			
75	90		Sqm	1	15	0.75		11.25			
90	92		Sqm	1	2	0.75		1.50			
		R H S									
0	15		Sqm	1	15	0.75		11.25			
15	30		Sqm	1	15	0.75		11.25			
30	45		Sqm	1	15	0.75		11.25			
45	60		Sqm	1	15	0.75		11.25			
60	75		Sqm	1	15	0.75		11.25			
75	90		Sqm	1	15	0.75		11.25			
90	92		Sqm	1	2	0.75		1.50			
		3rd Cross									
		L H S									
0	15		Sqm	1	15	0.75		11.25			
15	30		Sqm	1	15	0.75		11.25			
30	45		Sqm	1	15	0.75		11.25			
45	60		Sqm	1	15	0.75		11.25			
60	75		Sqm	1	15	0.75		11.25			
75	90		Sqm	1	15	0.75		11.25			
90	105		Sqm	1	15	0.75		11.25			
105	120		Sqm	1	15	0.75		11.25			
120	123		Sqm	1	3	0.75		2.25			
		R H S									
0	15		Sqm	1	15	0.75		11.25			
15	30		Sqm	1	15	0.75		11.25			
30	45		Sqm	1	15	0.75		11.25			
45	60		Sqm	1	15	0.75		11.25			
60	75		Sqm	1	15	0.75		11.25			
75	90		Sqm	1	15	0.75		11.25			
90	105		Sqm	1	15	0.75		11.25			
105	120		Sqm	1	15	0.75		11.25			
120	123		Sqm	1	3	0.75		2.25			
							TOTAL	**797.16**	**2337.00**	**1862962.9**	
Item no.08		**Plain /Reinforcement Cement Concrete M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, in Open Foundation complete as per Drawing and Technical Specifications Case - II : With Batching Plant, Transit Mixer and Concrete Pump MORTH Specification**									
		Cum									
		Vide Total Executed Quantity from Pre Measurement Sheet page no. 19 –23						77.12			
							TOTAL	**77.12**			
							QUANTITY LIMITED TO	**75.31**	**5148.42**	**387727.51**	
									SUB TOTAL AMOUNT	**8388857.7**	
									Add KRIDL @ 4%	**335554.31**	
									Add GST @ 12%	**1006662.9**	
									TOTAL AMOUNT	**9731075.0**	

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97